NOTE: The full Environmental Quality Service Council has not yet voted on the content of this report

AGRICULTURAL BUFFER ZONE
["CONSERVATION BUFFERS"]
SUBCOMMITTEE REPORT
AUGUST 13, 1998

In June, the non-point source pollution subcommittee identified agricultural run-off as a contributor to stream quality degradation. By controlling this run-off as well as other sources, major improvements to water quality can be achieved.

One method controlling agricultural run-off is the use of conservation buffers. Conservation buffers can take several forms. Depending on location and topography these buffers can be established as riparian buffers, filter strips, grassed waterways, shelter belts, field windbreaks, living snow fences, contour grass strips, or wetlands areas.

When used in conjunction with other conservation methods such as no-till farming, conservation buffers slow water runoff, trap sediments that carry other contaminants, and enhance infiltration and groundwater recharge. These buffers also trap fertilizers, pesticides, and heavy metals thereby preventing surface water contamination. Certain types of buffers are used to prevent soil erosion from winds.

If properly installed, these buffers can reduce erosion by 19 tons of soil per year per acre of buffer. They are capable of preventing up to 50 percent or more of nutrients and pesticides, 60 percent or more of certain pathogens, and 75 percent or more of sediments from entering waterways adjacent to farmland. Clearly, the establishment of conservation buffers along Indiana's waterways would enhance water quality in most all of our watersheds.

The question becomes one of how to interest the farmer to taking land out of production to establish these buffers. Currently there are two programs available in Indiana for establishing buffers. The state provides for property tax relief by reducing the assessment for land used as buffers from $450 per acre to $1 per acre. This hardly reimburses the farmer for the income lost by taking the land out of production or the cost of constructing the buffer. Further the "Red Tape" involved in enrolling land in the program is prohibitive.

The second program is the USDA's Conservation Reserve Program. Under this program farmers enter into a contract lasting up to 15 years. In return, they receive annual payments equal to the rental value of the land, incentive payment for certain practices, and sometimes can receive cost sharing assistance for establishing the buffer. In Indiana, the annual rental income averages about $78 per acre. The goal of the program is to establish 2 million miles of buffers by the year 2002. The program is limited by a cap on the number of acres that can be contracted. Therefore, contracts for land with lower rental values are preferred. This limits participation by Indiana. For example, USDA can establish more acres of buffer in areas where land rental values are lower than Indiana's average $78 per acre.

Indiana farmers do participate in the CRP program. As of March 1997, Indiana has enrolled over 380,000 acres in the program. However, the limits on the program will result in a reduction of the state's acres that are enrolled. Of the 144,000 acres that will expire, 142,000 have been offered as replacement. Of the acreage offered, only 77,000 acres have been accepted. This results in a net loss of buffers in Indiana.

The USDA program also falls short of fully compensating the farmer for establishing a buffer zone. Currently some funds are available for cost sharing of the expense associated with constructing the buffer. Although the farmer should expect to reduce some costs associated with soil erosion, etc., there is still not a dollar for dollar return. In order for sufficient acreage to be enrolled as conservation buffers, the farmer should be compensated fairly for lost production.

The USDA has other programs that provide greater incentives for farmers. However, these involve participation at the state and local level. For example, the Conservation Reserve Enhancement Program targets federal and state resources to specific projects. The Environmental Quality Incentives Program works with state and local governments to provide financial, technical and educational assistance to meet water quality goals.

It is apparent that methods exist for establishing conservation buffers that would protect Indiana's waterways. From a technical standpoint, we have the ability to improve water quality. If we can make wider use of certain management practices such as no-till farming, nutrient management, winter cover crops and conservation buffers, we can drastically reduce the impact of agricultural sources on water quality. In reality, without augmenting existing financial and educational assistance, the state will have limited success establishing additional conservation buffers.